ABSTRACT

A system for focusing broadband light within a reflectometer includes a concave spherical mirror for gathering light from the surface of a sample under inspection. The concave spherical mirror projects the received light to a convex spherical mirror. The combination of the two mirrors captures the light diverging from the sample and collimates the light into parallel rays. The light can then be passed through an aperture prior to entering a detector. Each of the two mirrors is fabricated as an off-axis section of a spherical mirror and positioned to form a partial Schwarzschild design without the associated problem of a central obscuration.